

Remarks

Claim 8 is amended as indicated. No new matter has been added by way of amendment. Reconsideration and reexamination of the application are requested.

Drawings

There were no drawings in the application. Examiner's attention is drawn to page 4, lines 20-21. Under the heading "Brief Description of the Several Views of the Drawing", there follows in brackets "Not Applicable". Nor is a drawing necessary where an application contains at least one process or method claim (MPEP 601.01(f)).

35 USC 112

Claims 8-13 are rejected under 35 USC 112 second paragraph as indefinite for failing to particularly point out and distinctively claim the subject matter Applicants regard as their invention. Specifically, it is not readily apparent from the text of claim 8 what the blocked catalyst consists of.

Applicants have amended claim 8 to correct the inadvertent omission of the word "amine" from line 8 of claim 8. The claim now reads in pertinent part, "...product of a sulfonyl isocyanate and a tertiary amine and/or a tin...." Support is found on page 5, lines 12-15 and page 6, lines 15-19.

Claim 8 as amended now sets forth the blocked catalyst. Withdrawal of the rejection of claims 8-13 under 35 USC 112 second paragraph is requested.

Rejection Under 35 USC 102

Claims 8, 9, and 11-13 are rejected under 35 USC 102(b) as anticipated by GB 2,242,435 to Janoski. Specifically, it is alleged that the cited reference discloses the method of adhering roofing materials by applying an isocyanate prepolymer having two reactive isocyanates, a catalyst in the form of an isocyanate and carboxylate and allowing the composition to cure. Applicants respectfully traverse.

Anticipation requires an exact correspondence of elements between the reference and the claimed invention.

The Janoski reference claims and discloses a solvent free composition comprising a base material (asphalt compositions) suspended in a liquid prepolymer. The composition preferably contains a compatibilizer that allows the asphalt to be suspended in the prepolymer. The reference discloses the use of a blocking agent for asphalt compositions having isocyanate reactive sites (page 9, beginning on line 9) and the use of blocking agents for the isocyanate of the prepolymer (page 31). The Janoski reference also discloses that molecular sieves can be used in systems that generate carbon dioxide in order to prevent unwanted bubbles (page 24). Methods of use disclosed include a roofing sealer, highway sealer, automotive undercoat and window mastic (page 21).

In contrast Applicants claim a method of adhering roofing material to a roof deck using a moisture curable foaming, polyurethane adhesive consisting essentially of an isocyanate prepolymer and a reversibly blocked catalyst. According to the presently claimed invention, the moisture curable, foaming, polyurethane adhesive is applied to a roof deck, the roof material is positioned on the deck with sufficient pressure to seat the material in the adhesive and the polyurethane adhesive

is allowed to foam, fill and cure. Applicants submit that the Janoski reference fails to provide a direct correspondence with the elements of Applicants claimed invention. Janoski does not suggest or disclose a urethane prepolymer catalyzed with a blocked catalyst. There is no disclosure of the claimed steps of positioning and seating the roofing material and allowing the adhesive to foam, fill and cure. In point of fact, Janoski teaches away from a foaming composition where it specifically discloses the use of molecular sieves in those systems that generate carbon dioxide, in order to prevent foaming. In view of the general lack of correspondence of elements between the reference and the claimed invention, Applicants submit that there can be no anticipation. Therefore, withdrawal of the rejection of claims 8, 9 and 11-13 under 35 USC 112 second paragraph is requested.

35 USC 103

Claim 10 is rejected under 35 USC 103(a) as unpatentable over the Janoski reference in view of Koyama et al., US 5,368,665. It is alleged that all of the elements of the present invention are disclosed in Janoski except the application of an acidic solution. Koyama is offered for the proposition that it supplies the mixing element. Applicants respectfully traverse.

The Koyama reference discloses a method of protecting the surface of porous tiles (ceramic tiles) from grout or joint compound. According to Koyama an acid soluble composition is coated onto the surface of the tiles. The tiles are then placed on a surface and the joint compound is spread over the tiles forcing the compound into the spaces between the tiles. The tiles are washed with water, then washed with an acidic solution to remove the acid soluble composition from the surface of the tiles. The tiles are then washed again with water.

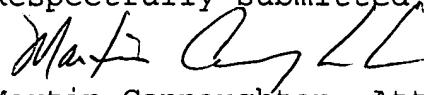
In contrast Applicants mist the surface of the roof deck prior to applying the adhesive. This is typically done to effect a more rapid cure of the adhesive in low humidity environments. Koyama clearly teaches a process of cleaning a preapplied coating from a surface of a tile subsequent to adhering that tile to a wall or floor. Applicants submit that there is no teaching provided by Koyama express or implied that would motivate one skilled in the art to mist a roof deck prior to application of an adhesive. It should also be pointed out that Janoski fails to suggest Applicants' claimed invention under 102 or 103. As discussed above, Janoski discloses an asphalt-prepolymer suspension that forms an elastomeric coating when cured. There is no teaching what-so-ever that would direct one skilled in the art to a method of adhering roofing material to a roof deck and there is certainly no teaching that would direct one skilled in the art to modify the Janoski composition by removing the asphalt from the composition and using a blocked catalyst to cure the urethane prepolymer. Furthermore, Janoski teaches away from foaming composition where it states that in systems where carbon dioxide is produced molecular sieves can be used to absorb the carbon dioxide to prevent unwanted bubbles (p. 24) and teaching away from is the epitome of nonobviousness.

In view of the above, Applicants request withdrawal of the rejection of claim 10 under 35 USC 103(a).

Conclusion

Claim 8 is amended. Withdrawal of all objections and rejections is requested. Allowance of claims 8-13 is earnestly requested.

Respectfully submitted,

  
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April 2, 2001

**CERTIFICATE OF MAILING**

I hereby certify that this Amendment is being deposited with the United States Postal Service on April 2, 2001 with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

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Marked-Up Version

8. (amended) A method of adhering roofing material to a roof deck, comprising:
  - A. applying a one-part, moisture curable, foaming, polyurethane adhesive composition, consisting essentially of:
    - i. an isocyanate terminated prepolymer prepared from at least one organic polyisocyanate and at least one composition containing at least two isocyanate reactive moieties, and
    - ii. a reversibly blocked catalyst, consisting essentially of; the addition product of a sulfonyl isocyanate and a tertiary amine and/or a tin (II) or tin (IV) carboxylate composition;  
to a roof deck;
  - B. positioning the roofing material on the deck with sufficient pressure to seat the roofing material in the polyurethane adhesive composition; and
  - C. allowing the polyurethane composition to foam, fill and cure.